City of Lafayette Staff Report

For:	City Council
By:	Leah Greenblat
	Tony Coe
	Niroop K. Srivatsa
Date Written:	May 8, 2009
Meeting Date:	May 11, 2009
Subject:	**Moraga Center Specific Plan: Review of the Response to Comments in the Final Environmental Impact Report (FEIR)**

Background

In June 2008, the Town of Moraga issued the draft Environmental Impact Report (DEIR) for the Moraga Center Specific Plan (MSP). Subject property is approximately 180+ acres in size and is located at Moraga Road and Moraga Way. The preferred plan calls for 720 residential units, 90,000 square feet of retail, 50,000 square feet of office, an 85 room hotel, 150 assisted and congregate care senior housing units, and a 30,000 square foot community center. The Lafayette City Council authorized the expenditure of a maximum of $15,000 to conduct a peer review of the transportation section of the Moraga Center Specific Plan DEIR. This amount was covered by the existing Planning and Engineering budgets. The consulting firm TJKM Transportation Consultants was hired to conduct this peer review for the cities of Orinda and Lafayette. TJKM's analysis was considered by the City Council in July 2008 and a letter containing Lafayette's comments was submitted to Moraga in August 2008 (letter attached).

The FEIR for the Moraga Center Specific Plan was released in late March. On April 13th, the City Council authorized the hiring of TJKM Transportation Consultants to analyze the Response to Comments in the FEIR and to suggest alternative options for mitigating traffic impacts. TJKM's comments are attached.

On April 20th, the Moraga Planning Commission considered the FEIR and recommended approval of Specific Plan Alternative 4. That alternative contains 560 residential units of varying density, 90,000 square feet of retail, 50,000 square feet of office, a 50 room hotel, a 30 room congregate care facility and a 60 room assisted living facility and the community center. The Moraga Parks and Recreation Commission has recommended that the size of the community center be reduced from 30,000 square feet to 20,000 square feet. There is no guarantee that the Town Council will approve this alternative. The Moraga Town Council is scheduled to consider the Planning Commission's recommendations on May 13th and adopt the EIR on May 27th.

8B

FEIR Response to Comments

Staff and the consultant have reviewed the document and find the Responses to Comments to be inadequate. The EIR fails to fully analyze impacts on the streets and intersections in Lafayette and offers unrealistic or ineffective mitigation measures that are inconsistent with the Lafayette General Plan.

Recommendation

Authorize the Mayor to sign and forward the attached letter and TJKM report to the Town of Moraga.

Attachments

1. Draft letter to Moraga
2. TJKM report
3. Lafayette's comments on the DEIR

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May 8, 2009

Town of Moraga Planning Department
Attn: Mayor Dave Trotter
329 Rheem Boulevard, Suite 2
Moraga, CA 94556

Dear Mayor Trotter:

As you are aware, the City of Lafayette ("Lafayette" or "the City") provided comments on the Draft Environmental Impact Report ("EIR") for the Moraga Center Specific Plan ("the Project" or "MCSP"). We would like to thank the Town of Moraga ("Moraga") for its responses to our comments. Unfortunately, after carefully reviewing these responses, Lafayette continues to have serious concerns regarding the EIR's methodology, assumptions, conclusions, and mitigation measures and maintains that the EIR fails to comply with the California Environmental Quality Act ("CEQA") (Public Resources Code section 21000 *et seq.* and California Code of Regulations, title 14, section 15000 *et seq.* ["State CEQA Guidelines"]).

One of the primary concerns Lafayette raises in this rebuttal is that the EIR does not adequately study the Project's impacts on neighboring jurisdictions. For example, the EIR assumes an overly optimistic project trip internalization rate for the MCSP which is significantly greater than the current internalized trip levels overall within Moraga. Using the more realistic overall Moraga internalization rate would result in considerably higher project trips entering and leaving Moraga thereby impacting streets in Lafayette and Orinda.

Another concern is the failure to provide and adequately study alternative mitigation measures within Moraga's control that would reduce the impacts on neighboring jurisdictions. The FEIR's response to this concern is to state that *"Under Contra Costa County Measure J (effective April 2009) – Cooperative planning for compliance with growth management program – Lafayette is obligated to implement mitigation measures that are identified in an adjacent jurisdictions environmental documentation."*[1] Neither Orinda nor Lafayette is obligated to implement measures that are inconsistent with their respective general plans.

Attached to this letter is a review by TJKM Transportation Consultants ("TJKM") of Moraga's responses to the comments previously provided by TJKM on the Traffic/Circulation section of the EIR. The comments contained in the TJKM report demonstrate that Moraga's responses to Lafayette's previous comments are inadequate. All of the concerns Lafayette raised here and in its previous comment letter must be

[1] Moraga Center Specific Plan FEIR, page 6-73

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addressed and the problematic areas rectified. Lafayette urges Moraga to diligently consider and analyze the potential environmental impacts of the Project. As we have stated before, CEQA does not authorize an agency to proceed with a project that will have significant, unmitigated effects on the environment, unless the measures necessary to mitigate those effects are truly infeasible.

We welcome you to contact us should you have any questions or wish to discuss further.

Sincerely,

Don Tatzin
Mayor

Attachments

1. TJKM report dated May 8, 2009
2. Lafayette's comments on the DEIR dated August 1, 2008

TJKM

Vision That Moves Your Community

Transportation Consultants

May 8, 2009

Ms. Niroop Srivatsa
Planning & Building Services Manager
City of Lafayette
3675 Mt. Diablo Boulevard, Suite 210
Lafayette, CA 94549

Via E-mail Only: nsrivatsa@ci.lafayette.ca.us

Subject: Peer Review of Traffic-Related Responses to Comments in Moraga Center Specific Plan Final Environmental Impact Report

Dear Ms. Srivatsa:

TJKM is pleased to provide you with this review of Fehr and Peers' response to the traffic-related comments contained within the Final Environmental Impact Report (FEIR) for the Moraga Center Specific Plan (MCSP) dated March 25, 2009. The extent of our response to Fehr and Peers' (F&P) comments relates to Comments 43-a through 44-dd, which responded to our original comments that were specific to the MCSP Draft Environmental Impact Report (DEIR) traffic analysis.

The comments issued by TJKM in this letter are intended to be included in the overall response by the City of Lafayette to the MCSP FEIR during the public review comment period. The scope of TJKM comments include general comments relating to significant ongoing issues with respect to traffic-related assumptions contained in the EIR, as well as specific responses to Comments 43-a through 44-dd as relevant to the traffic analysis.

Executive Summary

TJKM has completed a review of the Fehr and Peers (F&P) response to comments contained in the Final Environmental Impact Report (FEIR) for the Moraga Center Specific Plan (MCSP) that are relevant to the City of Lafayette. Based on this review, TJKM has reached the following conclusions, which as a result may require new or revised traffic analysis for the EIR and also consideration of additional MCSP traffic-related mitigations:

Traffic Analysis

Ongoing DEIR Issues Requiring Additional Analysis / Clarification

- The FEIR does not adequately address the discrepancy in external trip assumptions stated in our previous DEIR traffic study comments. In Comments 44-d and 44-e of the FEIR, F&P stated that 86 percent of commuters travelling outside the Town of Moraga, while 54 percent of a.m. peak hour trips and 62 percent of p.m. peak hour trips for the project stay within Moraga. This discrepancy needs to be explained, since the predominance of a.m. / p.m. peak hour trips external to Moraga is expected to be commuter trips.
- The retail trip generation rates used to develop MCSP buildout trip generation underestimates the potential full impact of retail trips in the MCSP. The retail rates used in the EIR traffic analysis are based on current economic projections that include a nine (9) percent retail vacancy rate and assume that the future retail mix will continue to be primarily local-serving, which may not be realistic.

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- There is a significant difference between the EIR and Institute of Transportation Engineers (ITE) standards in terms of MCSP project trip generation, which underestimates project traffic impacts. Based on Institute of Transportation Engineers (ITE) rates, estimated p.m. peak hour trip generation for the proposed project without the community center is 17 percent higher than F&P calculations (824 trips vs. 703 trips). As a result, the traffic analysis should be updated using the standard ITE rates.
- Trip internalization rates used for the proposed MCSP project in the EIR traffic analysis are significantly greater than current internalized trip levels overall within Moraga. Using the overall Moraga internalization rates would result in considerably higher project trips entering and leaving Moraga, as well as additional traffic impacts outside Moraga.
- It is inappropriate to apply a single overall peak hour factor (PHF) at intersections with minor side streets. The traffic analysis should be updated to reflect actual approach PHFs for minor side streets.

New FEIR Issues Requiring Additional Analysis / Clarification

- Based on standard ITE trip generation rates, TJKM estimates that the MCSP would generate approximately 522 inbound and 488 outbound trips during the p.m. peak hour. However, F&P project trip generation shows 251 inbound and 243 outbound project trips during the p.m. peak hour. These EIR project trip increments are approximately 50 to 52 percent less than the comparable outbound and inbound trips respectively based on standard ITE rates. This indicates that the MCSP project is likely underestimating the impacts of the project.
- Internal trips were erroneously applied to the project trip generation calculations of Fehr and Peers (2007), Table 13, which was used in the MCSP traffic analysis. Trips that are external to the project site but stay within Moraga were incorrectly treated as internal trips, and therefore a potentially significant number of project trips are missing from gateway intersections leading to the project site within Moraga. The use of this internalization procedure has resulted in much fewer project trips than would be expected to use roadways external to the site.
- Furthermore, the EIR needs to clarify the 54 / 62 percent internalization rates relative to the trip distribution percentages shown on DEIR page 4.F-25, which state that 29 percent of commercial trips and 34 percent of residential trips stay within Moraga during the combined a.m. and p.m. peak hours. It appears that these percentages may be double counting internalized trips for the proposed project.
- For the park and ride mitigation proposed in the EIR as part of overall transportation demand management (TDM) measures for the proposed project, expected trip reductions should be quantified, documented, and analyzed. Currently, the EIR analysis only includes a qualitative evaluation.
- Typically, single-family residential units in the Lamorinda area are built at densities of 1-2 dwelling units per acre, which based on San Diego Association of Governments (SANDAG) rates generate approximately 12 trips per day per unit. Also, based on its own residential studies, the City of Lafayette has estimated that single-family units generate 14 trips per day. However, the EIR analysis uses a residential rate of 10.58 trips per day. This underestimates the potential full impact of residential units proposed under MCSP Alternative 4, which proposes the maximum number of single-family units.

Mitigations for Traffic Impacts

Since the project appears to underestimate project trips into and out of Moraga, and current mitigations do not fully address identified significant impacts, additional mitigations should be considered, including, but not limited to, the following:

- Reduction in size of the overall MCSP project, such that the expected trip generation is equivalent to or less than the estimated trips generated by the General Plan-based land uses for the project site.
- The traffic study should consider other measures to regulate project traffic. An example of such measures is to employ metering through the use of existing traffic signals along the main gateway roadways leading into Moraga.
- Traffic calming measures in neighborhood areas that offer alternative routes to the main roadways into Moraga that have the potential to reduce or eliminate cut through traffic.
- Initiation of a senior bus transportation program to reduce MCSP trips generated by the proposed senior housing component.
- Provide a shuttle bus from the MCSP project area to the Lafayette and Orinda BART stations, since many MCSP trips during commute hours are expected to use BART.
- In addition to reduction of the MCSP project size, the community center should be restricted to Moraga residents, which would eliminate potential regional traffic impacts.

General Comments

TJKM compared the MCSP project trip increment between Existing and Existing Plus Project Conditions, shown in Figure 1. Tables I and II show the background calculations for this incremental volume comparison. Based on this comparison, TJKM found that the p.m. peak hour volume differential between the two scenarios on the external gateways based on the F&P analysis is 251 inbound trips and 243 outbound trips.

However, as shown in our letter comments to you dated July 31, 2008 (Table 1), based on standard ITE rates, the proposed MCSP project is expected to generate up to 432 inbound trips and 392 outbound trips, excluding the community center. When including the community center based on the proposed project description in the DEIR, 90 trips are added to both the inbound and outbound directions during the p.m. peak hour. Therefore, it is expected that the proposed MCSP project would generate 522 inbound trips and 482 outbound trips during the p.m. peak hour based on standard ITE rates.

In a typical traffic impact analysis, the standard procedure is to estimate the full expected project trip generation and distribute and assign these trips to the local network. Based on standard procedure and ITE rates, our estimates for the MCSP are 522 inbound trips and 482 outbound trips during the p.m. peak hour. The majority of these trips should get added to the gateway intersections. However, based on F&P assigned project trips to the gateway intersections, they have added only 251 inbound trip and 243 outbound trips during the p.m. peak hour. These EIR project trip increments are approximately 50 to 52 percent less than the comparable outbound and inbound trips respectively based on standard ITE rates. This indicates that the MCSP project is likely underestimating the impacts of the project.

Table I: Incremental Intersection Traffic Volume Comparison Between Existing and Existing Plus Project Conditions (P.M. Peak Hour)

Intersection	*ID #*	*Scenarios*	*SBR*	*SBT*	*SBL*	*WBR*	*WBT*	*WBL*	*NBR*	*NBT*	*NBL*	*EBR*	*EBT*	*EBL*	*Total*
Moraga Way / Ivy Drive	10	Existing	38	7	6	60	460	83	100	7	176	97	750	14	1,798
		Existing + Project	38	7	6	60	521	83	100	7	176	97	811	14	1,920
		Increment	**0**	**0**	**0**	**0**	**61**	**0**	**0**	**0**	**0**	**0**	**61**	**0**	**122**
Moraga Road / Corliss Drive	49	Existing	108	584	0	0	0	0	0	560	39	25	0	108	1,424
		Existing + Project	108	714	0	0	0	0	0	685	39	25	0	108	1,679
		Increment	**0**	**130**	**0**	**0**	**0**	**0**	**0**	**125**	**0**	**0**	**0**	**0**	**255**
St. Mary's Road / St. Mary's Pkwy	38	Existing	0	207	167	197	0	140	138	256	0	0	0	0	1,105
		Existing + Project	0	242	167	197	0	165	162	289	0	0	0	0	1,222
		Increment	**0**	**35**	**0**	**0**	**0**	**25**	**24**	**33**	**0**	**0**	**0**	**0**	**117**

Table II: Incremental Directional Roadway Segment Traffic Volume Comparison Between Existing and Existing Plus Project Conditions (P.M. Peak Hour)

Location	*SB/WB*	*NB/EB*
Volume Increment on Link A	61	61
Volume Increment on Link B	130	125
Volume Increment on Link C	60	57
Total	**251**	**243**

Another issue with the MCSP project trip generation concerns the treatment of the project trips internal to Moraga. The EIR estimate of 221 inbound and 202 outbound trips generated by the MCSP is based on project trip generation estimates shown in Table 13 of Fehr and Peers (2007). This table shows that many trips within Moraga were also considered as trips that were internal to the MCSP site and thereby deducted from the overall project trip generation. This is an improper application of internal trip reduction, as evidenced by the significant difference between the ITE-based and F&P trip generation calculations shown in Table 4.F-7. This significant difference is also shown in our gateway trip increment calculation in Figure 1, which shows that the trips within Moraga but external to the project site are not added to the gateway intersections. The F&P internal trip reduction procedure therefore is erroneous, as it results in much fewer project trips than would be expected to use roadways external to the site but located within Moraga.

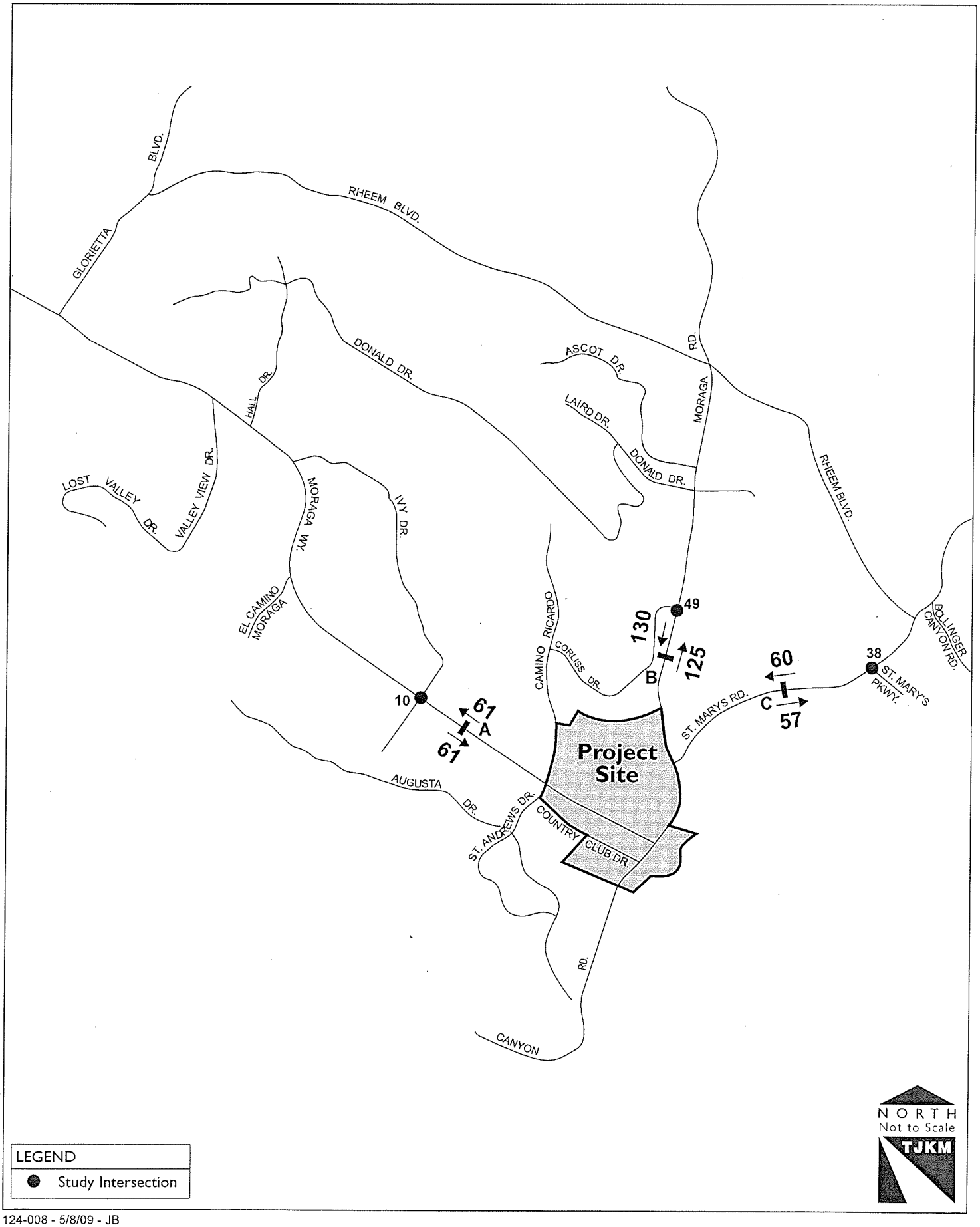
The DEIR proposed a park and ride facility in the EIR as part of overall transportation demand management (TDM) measures for the proposed project. However, the DEIR failed to analyze, quantify and document the expected trip reductions due to the park and ride facility. Currently, the EIR analysis only includes a qualitative evaluation.

Town of Moraga - Moraga Center Specific Plan - Peer Review

Figure

Project Trip Increment (PM Peak Hour)

1



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Response to Specific Comments

In addition to the above general comments regarding the EIR traffic analysis, TJKM also has the following comments on selected F&P responses in the traffic-related portion of the FEIR:

- Comment 43-p. TJKM disagrees with the assertion that developing preliminary construction trip estimates for the MCSP are speculative. In previous studies, TJKM has developed preliminary quantitative estimates of construction truck trips and routes based on the expected land use totals of proposed projects, such as for residential dwelling units and commercial square footage. This is done using preliminary estimates of construction materials needed for the construction of the various buildings for the proposed project. Using expected truck sizes, the number of haul trips to and from the project site can be estimated, and distributions can be developed based on the likely routes to/from sources of building materials.

  A related FEIR comment states that although buildout of the MCSP is expected to increase traffic by 3.6 percent on the five primary roadways accessing Moraga, the character or mix of delivery truck traffic is expected to increase by the same amount. This appears to assume the same proportional level of retail activity in Moraga, before and after construction of the proposed MCSP. F&P should provide a basis for the assumption that the proportion of commercial / delivery truck activity to overall vehicle mix would remain the same with construction of the proposed MCSP.

- Comments 44-a and 44-b. F&P states that the retail trip generation rates were based on current economic projections for retail in Moraga, which includes a 9 percent vacancy rate based on a 2006 EPS survey. Using this projection for MCSP buildout does not represent a worst-case condition for retail in the MCSP. The EIR should include a worst-case estimate of retail trips in order to fully account for expected impacts. Otherwise, underestimation of trips would create a future situation in which it must be determined who would be responsible for project impacts based on additional trips that exceed these projections.

  Furthermore, the current F&P retail trip generation in the EIR assumes that all retail would have the same primarily local-serving characteristics that current retail in the area does today. This does not take into account the possibility of future occupancies by regional retail establishments that would increase through trips through Lafayette and Orinda and would also reduce internalization rates.

- Comment 44-c. TJKM's comparative analysis of the EIR proposed project trip generation and our ITE-based trip generation revealed a 17 percent difference in trip totals, which is significant. Table 4.F-7 in the DEIR shows net new trips generated by the MCSP, but not the actual totals for the full project. Also, the EIR analysis should reflect a more standard retail trip rate such as ITE, particularly since retail occupancies in the MCSP may exceed current economic projections in the future. Using this worst-case retail trip generation provides a more realistic basis for analyzing future traffic impacts of the MCSP.

- Comments 44-d and 44-e. In the DEIR, the F&P traffic analysis stated that 86 percent of commuters travel outside the Town of Moraga. However, in Comment 30-x of the FEIR, F&P states that 54 percent of a.m. peak hour trips and 62 percent of p.m. peak hour trips stay in Moraga. This discrepancy needs to be explained, since the predominance of a.m. / p.m. peak hour trips external to Moraga is expected to be commuter trips.

  In addition, clarification is needed between the 54 percent a.m. / 62 percent p.m. of proposed project trips staying within Moraga described above and the project trip distribution percentages described on DEIR page 4.F-25. On this page, the project is described as generating 29 percent of commercial trips and 34 percent of residential trips that stay within Moraga during the combined a.m. and p.m. peak hours. The EIR needs to clarify whether how these percentages relate to the 54 / 62 internalization rates for the

project. It appears that these percentages may be double counting internalized trips for the proposed project.

Also, based on Comment 30-x, it should be noted that the 62 percent of p.m. peak hour trips that are external to Moraga were calculated based on net new project trips, rather than the overall expected project trip generation. The standard procedure is to calculate this percentage based on overall trips, not net new trips. On the basis of standard procedure, it is estimated that the full project trip generation calculated by F&P would yield an internalization percentage of 77 percent during the p.m. peak hour (=1- 162 external p.m. / 703 overall p.m. trips), which is an extremely high percentage even for a large city.

- Comments 44-f and 44-g. The comments state that based on refinements to the current CCTA model, the EIR modeling analysis yielded a 38 percent internalization rate for trips within the Town of Moraga. This is close to the 28 percent and 35 percent internalization rates for trips within Moraga (a.m. and p.m. peak hours, respectively) that TJKM found in its examination of the CCTA model.

  However, in Comment 30-x, F&P states that trip internalization rates for the MCSP project are 54 percent during the a.m. peak hour and 62 percent during the p.m. peak hour. This varies significantly from the 28/35 rates for a.m. / p.m. found by TJKM for the unadjusted CCTA model, while at the same time expected trip generation for the General Plan alternative at the project site represents only about 4 percent of total Town of Moraga vehicle trip generation. Since this share of project trips to Town trips is very low, this raises the question of why internalization rates should vary so significantly from overall Town internalization rates for the a.m. and p.m. peak hours for the MCSP project. An explanation should be provided.

- Comment 44-o. TJKM agrees with F&P that for a typical intersection, the method of using an average peak hour factor (PHF) for the overall intersection is a valid method. However, some intersections in the Lamorinda area consist of major streets with low-volume minor side streets. In this case, applying a PHF for each approach is an appropriate method and should be applied in the EIR traffic analysis. Consider the following hypothetical example of major street and minor street in Table III:

Note in Table III that the northbound and southbound directions have reasonably uniform 15-minute traffic flows throughout the one-hour peak period in this example, whereas the westbound direction is primarily low volume, except for the third 15-minute period where vehicle totals spike up to 65 vehicles. In this example, if a typical average PHF of 0.97 is applied uniformly to the intersection, we find that the estimated peak 15-minute volumes for the northbound and southbound directions (which assumes uniform traffic flow throughout the peak one hour) are very close to the actual observed 15-minute volumes (872 and 452, respectively).

However, the estimated 15-minute volume for the westbound minor side street approach is only 26 vehicles based on a PHF of 0.97, thereby not accounting for the peak 15-minute period that had 65 vehicles. The final row in Table VIII shows that if approach PHFs are used instead, the estimated peak 15-minute volume more closely matches the actual observed 15-minute volumes for all approaches, and in particular the method accounts for the high 15-minute period in the westbound direction. Therefore, it is recommended that this approach be used in the EIR traffic analysis for all intersections that include low-volume side streets.

Table III: Peak Hour Factor Example for Intersection Minor Side Streets

	NB	*SB*	*WB*	*Total*
0-15 minutes	840	450	5	1,295
15-30 minutes	825	425	15	1,265
30-45 minutes	850	435	65	1,350
45-60 minutes	860	440	15	1,315
PHF	0.98	0.97	0.38	0.97
Total 1-hour volume	3,375	1750	100	5,225
Estimated Peak 15-Minute Volumes	872	452	26	Using PHF of 0.97
	860	450	65	Using Approach PHF

- Comment 44-r. According to Table 4.F-11 in the DEIR, community center trips amount to no more than 30 trips during the a.m. peak hour, depending on the study intersection. Because this is a low number of trips, TJKM still concludes that reduction of the community center size will have marginal benefits in terms of mitigating project study intersections with significant impacts. Instead, a reduced MCSP project size should be considered and analyzed that is equivalent to or less than the expected trips generated by the General Plan-based land use for the project site. In addition, the community center should be restricted to Moraga residents, which would eliminate the potential regional traffic impacts.

Additional Mitigation Measure Considerations

Comment 43-e in the FEIR states that some mitigation measures proposed thus far in the EIR are inadequate and that more mitigations for project impacts are needed. Although various mitigation measures have been rejected by the Lamorinda community over the years, this fact does not preclude the need to explore additional alternative mitigation measures. Exploration of new measures may include, but not be limited to, a reconsideration of current Lamorinda Action Plan mitigations.

The EIR analysis should additionally take into consideration the following:

- A reduced MCSP project size should be considered and analyzed that is equivalent to the expected trips generated by the General Plan-based land use for the project site.
- Traffic calming measures should be considered on residential streets that provide parallel routes as an alternative to future congested intersections with buildout of the MCSP. An example of a potential cut-through route is Reliez Station Road between Pleasant Hill Road and Olympic Boulevard, which could be used by southbound vehicles attempting to avoid congestion at the Pleasant Hill Road / Olympic Boulevard intersection. These measures have the potential to reduce cut-through traffic in neighborhoods and should be considered as mitigation. Additional neighborhood local streets in Lafayette that may potentially be affected by cut-through traffic and therefore may be locations that require traffic calming measures include, Glenside Drive (North), Florence Drive, Los Palos Drive, School Street, Avalon Avenue, First Street, Topper Lane, Second Street / Monroe Avenue, Moraga Boulevard, Hamlin Road / Sweet Drive / Woodview Drive, Mountain View Drive, Brook Street, and Carol Lane
- Based on the expected increase in both construction and retail-related truck trips using primary roads in Lafayette, the EIR should consider rehabilitation of Moraga Road as part of the mitigation measures.

- Traffic signal installation may not be an appropriate mitigation in Lafayette. In particular, alternative mitigations should be considered at Glenside Drive / Reliez Station Road (#39) and Glenside Drive / Burton Drive (#40), where new traffic signals are proposed as mitigation.
- The study should consider the initiation of a senior bus transportation program to reduce MCSP trips generated by the proposed senior housing component.
- The study should consider providing a shuttle bus from the MCSP project area to the Lafayette and Orinda BART stations, since many MCSP trips during commute hours are expected to use BART.

TJKM appreciates the opportunity to provide additional review findings on the Moraga Center Specific Plan EIR traffic analysis. Please call us at (925) 463-0611 if you have any questions concerning our comments. Thank you.

Sincerely,

Joy Bhattacharya, P.E., P.T.O.E.
Senior Associate

Andrew Kluter, P.E.
Senior Engineer / Associate

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Don Tatzin, Vice Mayor
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Carl Anduri, Council Member
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August 1, 2008

Town of Moraga Planning Department
Attn: Lori Salamack, Planning Director
329 Rheem Boulevard, Suite 2
Moraga, CA 94556

Re: Comments to Draft Environmental Impact Report for the Moraga Center Specific Plan

Dear Ms. Salamack:

Thank you for providing the City of Lafayette ("Lafayette" or "the City") with the opportunity to comment on the Draft Environmental Impact Report ("EIR") for the Moraga Center Specific Plan ("the Project"). Unfortunately, after careful review of the document, the City has no choice but to convey its serious concerns regarding the EIR's methodology, assumptions, conclusions, and mitigation measures.

Summary

Lafayette is particularly alarmed by the detrimental impacts that the Project will have on area traffic and the EIR's failure to address or mitigate those impacts. Indeed, the reasonably foreseeable environmental impacts of the Project have not been meaningfully reviewed, and the EIR's analysis and conclusions are not supported by substantial evidence as required by CEQA. As such and for these reasons, Lafayette finds that the EIR fails to comply with the California Environmental Quality Act ("CEQA")[1].

Given these deficiencies, the EIR must, at a minimum, be substantially revised to include the necessary analysis to properly determine Project-related regional traffic impacts and propose enforceable mitigation measures. Once completed, the revised EIR must be recirculated for public review in order to comply with CEQA's requirements.

A primary purpose of CEQA is to "[i]nform governmental decision makers and the public about the potential, significant environmental effects of proposed activities."[2] An EIR achieves this objective by "identify[ying] possible ways to minimize the significant effects, and describe[ing] reasonable alternatives to the project" for consideration by the public and the lead agency approving the project.[3] "In assessing the impact of a proposed project on the environment, the lead agency normally examines the 'changes' in existing

[1] (Public Resources Code section 21000 et seq. and California Code of Regulations, title 14, section 15000 et seq. ["State CEQA Guidelines"]).
[2] (State CEQA Guidelines, § 15002, subd. (a)(1).)
[3] (State CEQA Guidelines, § 15121, subd. (a).)

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environmental conditions in the affected area that would occur if the proposed activity is implemented."[1] "Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects."[2]

Thus, in addition to its failure to properly analyze and mitigate the Project's environmental impacts, the EIR also fails to conform to CEQA's information requirements.

Lafayette's concerns are discussed in more detail below and in the attached letter from the City's consultants, TJKM Transportation Consultants.

PROJECT DESCRIPTION

The EIR's Project Description is not sufficiently comprehensive to fully describe the whole of the action that this Project entails.[3] Instead, the Project Description is overly general and thereby gives short shrift to many elements of the Project. Excluded, for example, are parking areas for both the commercial areas and the hundreds of dwelling units being proposed, supporting infrastructure, and any needed ancillary facilities. Of primary concern to Lafayette is the fact that the EIR requires traffic signals be installed and road improvements be made in Lafayette, as well as in Moraga and Orinda, but there is no evidence of this in the Project description. The Project description furthermore does not explain that several roads and right-of-ways are under the jurisdiction of public agencies other than the Town of Moraga, nor what approvals will be required from those other agencies. CEQA specifically requires that a project description provide and explain the approvals needed from other agencies to implement the Project.[4] Furthermore, while the density of the proposed Project violates the Town of Moraga General Plan, the need for a General Plan amendment is not disclosed in the Project Description. Because the Project Description fails to include these important aspects of the Project, it is per se insufficient[5], and this deficiency taints the entire analysis of the EIR.

TRAFFIC/CIRCULATION

Attached to this letter is a review of the Traffic/Circulation section of the EIR from TJKM, consultants specializing in transportation analysis and recognized as experts on this topic under CEQA.[6] The TJKM letter demonstrates that the assumptions underlying

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[1] (*San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 660; see also State CEQA Guidelines, § 15126.2, subd. (a).)

[2] (State CEQA Guidelines, § 15126.2, subd. (a).)

[3] (See *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193 ["An accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR"].)

[4] (State CEQA Guidelines, § 15124.)

[5] (See *Santiago County Water Dist. v. County of Orange* (1981) 118 Cal.App.3d 818, 829.)

[6] (See State CEQA Guidelines, § 15384 subd. (b).)

parts of the transportation analysis (e.g., how trip rates were generated) are often not disclosed. This lack of disclosure violates the informational purposes of CEQA. This is particularly disconcerting because elsewhere in the EIR, when assumptions are disclosed regarding Project trip internalization rates, for example, they lack a factual basis. This results in the erroneous conclusion that the Project will not significantly impact unsignalized intersections in Lafayette. This is but one example of this bad methodology.

All of the comments in the TJKM letter should be considered to be incorporated into this letter. In total, they constitute substantial evidence demonstrating that the Project will have significant environmental impacts and that these impacts are either not analyzed or sufficiently mitigated in the EIR. For this reason, all of these concerns must be addressed and the problematic areas rectified in a revised EIR.

MITIGATION MEASURES

One of Lafayette's primary concerns with the Traffic / Circulation section of the EIR involves the complete lack of mitigation measures for some Project impacts that have been found to be environmentally significant, and the inadequacy of other mitigation measures. While the Moraga General Plan EIR prepared in 2002 recognized that build-out of the Town of Moraga would have significant unavoidable impacts, including on traffic in Lafayette, a general discussion in a programmatic-level document does not excuse the lack of discussion, analysis, and mitigation when a specific project is proposed that will have significant environmental impacts. CEQA clearly requires that an EIR propose and analyze mitigation measures designed to minimize a project's significant impacts and that all feasible mitigation measures must be adopted.[1] The EIR blatantly violates this requirement by failing to consider <u>any</u> mitigation measures for several significant impacts to traffic in Lafayette and by failing to analyze and approve adequate, enforceable mitigation measures for other impacts. This wholesale failure to identify possible ways to minimize the Project's significant effects is in violation of State CEQA Guidelines[2], and must be rectified.[3]

Even where mitigation measures are identified in the EIR, they are insufficient for several reasons. First, the EIR requires the Project proponent to contribute a "fair share" fee for the installation of traffic signals at four intersections in the City of Lafayette, but it does not specify how much must be contributed. Thus, it cannot be said that the mitigation

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[1] (Pub. Res. Code, §§ 21002, 21002.1 subd. (a), 21100 subd. (b)(3), 21151.)

[2] (§ 15121, subd. (a), among other provisions of CEQA,)

[3] (See *Sierra Club v. Gilroy City Council* (1990) 222 Cal.App.3d 30, 41 [agencies must "deny approval of a project with significant adverse effects when feasible alternatives or feasible mitigation measures can substantially lessen such effects"].)

measure is likely to be successful in mitigating the traffic impacts.[1] The same is true for the mitigation measure to enhance transit service in the Lamorinda area.

Second, there is no analysis in the EIR of impacts due to implementation of such mitigation measures as the construction of additional traffic signals. These mitigation measures will have their own traffic, air quality, and noise impacts, among others, and each must be analyzed. When a mitigation measure is added that has the possibility of significant impacts of its own, the impacts of that measure must be analyzed.[2] The impacts of the mitigation measures here would be both short-term, construction-related impacts and long term and CEQA requires analysis of a project's temporary as well as long-term impacts.[3]

Third, the EIR does not support its conclusions that all of the Project's required mitigation measures will be sufficient. For example, the EIR states that the Project will impact the intersection of Moraga Road and Corliss Drive by reducing the Level of Service ("LOS") from LOS C to LOS E, and this will be mitigated by installation of a traffic signal. While the EIR states that the intersection will subsequently operate at LOS B, this conclusion is unsupported by data or analysis. In addition, construction of senior and student housing would only reduce vehicle trips if there are measures to ensure that these units are used by these populations, but the EIR contains no such measures. There are several examples throughout the traffic section of conclusions based on questionable assumptions or lacking analytical support.

Fourth, the mitigation measures require construction of four traffic signals in Lafayette, but two of these signals are not anticipated in any of the City's planning documents, and implementation of these mitigation measures would thus cause an inconsistency with Lafayette's General Plan. This is not disclosed anywhere in the EIR. This oversight is possibly due to the fact that the EIR uses CEQA thresholds of significance that differ from the standard thresholds set forth in the CEQA Appendix G Environmental Checklist Form, which require analysis of whether the project would "[c]onflict with <u>any</u> applicable land use plan, policy, or regulation of an agency with jurisdiction over the project . . . ." (Appx. G, threshold IX(b) [emphasis added].)

By contrast, the threshold the Town of Moraga uses only addresses whether the Project is consistent with the Town of Moraga's 2002 General Plan. (See EIR, at p. 4.A-6.) Consequently, the impacts to Lafayette's General Plan consistency have been ignored. While a jurisdiction may adopt its own CEQA thresholds of significance, they cannot be lesser standards that those in Appendix G. Because insufficient thresholds are used throughout the EIR, significant portions of the document must be revised to ensure that

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[1] (See *Anderson First Coalition v. City of Anderson* (2005) 130 Cal.App.4th 1173, 1189 [to be sufficient under CEQA, fair share mitigation must specify amount or percentage to be contributed].)

[2] (State CEQA Guidelines, § 15126.4 subd. (a)(1)(D).)

[3] (See State CEQA Guidelines, § 15126.2 subd. (a).)

the correct thresholds are used in order to sufficiently evaluate the Project's environmental impacts.

Finally, some of the mitigation measures are legally insufficient insofar as they must be carried out by Lafayette, not the project developer or the Town of Moraga. When imposing measures to mitigate a project's significant environmental impacts, a public agency may exercise only those powers provided by legal authority independent of CEQA[1] and the Town of Moraga has no such power over the actions of Lafayette. Consequently, the Town of Moraga cannot impose or suggest mitigation measures in another jurisdiction without that jurisdiction's permission, particularly when those measures are inconsistent with an applicable general plan. There is no existing agreement requiring Lafayette to carry out such mitigation and therefore these measures are unenforceable. For these reasons, the insufficient mitigation renders the EIR legally deficient.

Instead, the EIR should explore a range of mitigation measures or design elements for all traffic impacts identified in the EIR and in this and other comment letters and should adopt measures for every impact that are both enforceable and able to reduce the Project's significant impacts. For example, the EIR should explore and adopt such measures as installing new and coordinating existing traffic signals to improve traffic flow, contributing specified sums to existing traffic improvement programs covering affected roadways, and providing a predetermined sum for improvements to transit services that will be used to improve transit in the most impacted areas.

If these measures are insufficient to fully mitigate traffic impacts, another possibility that should be included in the EIR is the option of installing traffic metering devices.

RESPONSIBLE AGENCY

The City of Lafayette should have been but was not identified as a responsible agency. Under CEQA, all public agencies other than the lead agency with discretionary approval over a project are responsible agencies.[2] Because Lafayette is the approving authority for a portion of the Project in the form of four traffic signals that the EIR states are required to be constructed for the Project, it has the requisite discretionary approval and must be named a responsible agency.

ALTERNATIVES

CEQA requires that a draft EIR contain an analysis of a reasonable range of alternatives to a proposed project that will meet most of the project's goals while avoiding or

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[1] (Pub. Res. Code, § 21004)

[2] (State CEQA Guidelines, § 15381.)

substantially lessening the project's significant environmental impacts.[1] The Moraga Specific Plan EIR fails to satisfy this fundamental requirement. The alternatives are all very similar to the proposed Project. Little attempt was made to explore any option or proposal other than the Project. Most problematically, there was no attempt to explore alternatives that lessen the Project impacts as required by CEQA. An alternative with less than significant traffic impacts outside Moraga's jurisdiction should be explored -- a reduced Project size, for example. Alternatives involving housing only, commercial only, or a different location for parts or all of the Project could also be explored to determine if these options could improve the significant environmental impacts.

Furthermore, Alternative 3 was found to be the environmentally superior alternative (other than the No Project Alternative), with reduced impacts on ground disturbance, population growth, and traffic generation[2] In addition, page 2-14 shows that Alternatives 1, 2 and 3 would all better control maximum peak hour traffic volumes, but no reasons are given for rejecting any of these alternatives. Merely stating, for example, that Alternative 2 "may not be as economically feasible as under the Proposed Project" is not sufficient.[3]

MISCELLANEOUS ENVIRONMENTAL ISSUES

The insufficiency of the Project Description, Alternatives, and Traffic/Circulation sections impact the entire EIR and render several other sections deficient as well. For example, the Air Quality section does not appropriately account for the construction and implementation phases of the complete Project, and the Noise section is deficient for similar reasons. The increased traffic problems and delays caused by the Project will also further strain public services. The EIR's conclusion that the Project will have no growth-inducing impacts because it adds no infrastructure is unpersuasive since it is adding several hundred housing units, and therefore directly induces population growth in the area pursuant to Appendix G threshold XII(a). In addition, the EIR fails to include sufficient feasible mitigation measures for global warming/greenhouse gas impacts[4] All of these issues must be addressed and remedied.

CONCLUSION

Lafayette has grave concerns about this Project and its many unmitigated significant environmental impacts, particularly those that impact Lafayette. CEQA does not authorize an agency to proceed with a project that will have significant, unmitigated effects on the environment unless the measures necessary to mitigate those effects are

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[1] (State CEQA Guidelines, § 15126.6.)

[2] (see EIR at p. 5-22).

[3] (See *Village Laguna of Laguna Beach, Inc. v. Board of Supervisors* (1982) 134 Cal.App.3d 1022, 1034.)

[4] (see, e.g., http://www.arb.ca.gov/cc/scopingplan/document/draftscopingplan.pdf.)

truly infeasible.[1] Therefore, all of the significant impacts for which no mitigation was adopted in the Project must be re-evaluated. Furthermore, any mitigation measures in the EIR that are called out by this letter, the TJKM letter, and letters from other parties and found to be inadequate, incomplete, or illusory must also be re-evaluated.

Lafayette urges the Town of Moraga to consider and address all of the Project's potential environmental impacts discussed above, as well as any others raised during this comment period, and to correct the EIR accordingly.

In light of the many problems, the Town of Moraga may wish to consider whether it should approve this Project at this level of intensity knowing that the Project will have a detrimental and immitigable impact on traffic in Lamorinda.

On behalf of the City of Lafayette, I would again like to thank you for this opportunity to comment on the Moraga Center Specific Plan Project and its EIR. If you have any questions, please do not hesitate to call me or my staff to discuss ways in which the cities can work together in the planning process. Thank you for your attention to these comments. The City of Lafayette looks forward to reviewing your revised EIR.

Sincerely,

Mike Anderson
Mayor, City of Lafayette

Cc: Moraga Town Council
Orinda City Council

[1] (*City of Marina v. Board of Trustees of the California State University* (2006) 39 Cal.4th 341, 368-369; see also Pub. Res. Code, § 21081, subd. (a) and State CEQA Guidelines, § 15091, subd. (a).)

TJKM

Vision That Moves Your Community

Transportation Consultants

July 31, 2008

Ms. Niroop Srivatsa
City of Lafayette
3675 Mt. Diablo Boulevard, #210
Lafayette, CA 94549
Via E-mail Only: nsrivatsa@ci.lafayette.ca.us

Subject: Peer Review of "Moraga Center Specific Plan Draft Environmental Impact Report"

Dear Niroop:

TJKM is pleased to provide you with this peer review of the Transportation section of the Moraga Center Specific Plan (MSP) Draft Environmental Impact Report (DEIR) dated June 16, 2008, prepared by Fehr and Peers. In general, the report is a comprehensive traffic analysis of the proposed project in accordance with the guidelines established by the Contra Costa County Transportation Authority (CCTA), Town of Moraga, City of Lafayette and the City of Orinda. However, TJKM in many cases finds the DEIR lacking in its assumptions, traffic analysis, and recommended mitigation measures on the streets and intersections in Lafayette and Orinda. The peer review findings are meant to be part of the study responses by the Cities of Orinda and Lafayette during the DEIR public review comment period. The issues raised in this letter should be addressed and rectified prior to the final issuance of the EIR.

Listed below are the specific comments on the report:

Trip Generation

- MSP trip generation rates are based on a June 2007 Fehr and Peers document, *Effects of Planned Development at Moraga Town Center on Community-Wide Travel Patterns.* The rates in this document are based on a wide variety of sources, including the Contra Costa Transportation Authority (CCTA) model, the Bay Area Travel Survey (BATS) and the 2000 Census. However, the text and tables do not clearly outline the steps performed to generate the trip rates or how each data source was used specifically.
- Retail trip generation for the proposed MSP was based on Fehr and Peers' analysis for the Town of Moraga General Plan contained in the above June 2007 study. The trip rates in this study were based on the existing Moraga Shopping Center, which at the time of the analysis was not fully occupied. Using the same rates for future General Plan buildout conditions is problematic, given that residential unit totals in Moraga are expected to increase from existing conditions to buildout. When considering this issue, it would be reasonable to expect that retail rates under buildout would be higher than those used for buildout in the Specific Plan analysis.
- TJKM used the seventh edition of *Trip Generation* from the Institute of Transportation Engineers (ITE) to estimate expected trip generation for the proposed MSP. ITE has compiled the results of trip generation research from over 4,250 individual land use studies throughout the United States and Canada. The proposed project's estimated trips based on ITE rates are shown in Table 1. It is expected that the proposed project will generate approximately 495 trips during the a.m. peak hour and 824 trips during the p.m. peak hour. As shown in Table 1, based on standard ITE trip generation rates for the

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proposed MSP land uses, p.m. peak hour trip generation is significantly higher than the trip generation estimated in Table 12B of the June 2007 study used in the DEIR analysis.

Table I: Project Trip Generation

Proposed Project	Land Use (ITE Code)	Size	Daily Rate	Daily Trips	A.M.					P.M.				
					Trip Rate	In: Out Ratio	In	Out	Total	Trip Rate	In: Out Ratio	In	Out	Total
Single Family	Single-Family Detached (210)	30 du	9.57	287	0.75	25:75	6	17	23	1.01	63:37	19	11	30
Multi-Family Residences	Residential Condo/ Townhouse (230)	300 du	5.86	1758	0.44	17:83	22	110	132	0.52	67:33	105	51	156
Workforce Housing	Residential Condo/ Townhouse (230)	50 du	5.86	293	0.44	17:83	4	18	22	0.52	67:33	17	9	26
St. Mary's Residences	Apartment (220)	50 du	T=6.01 (x)+ 150.46	451		20:80	6	23	28		65:35	29	16	45
Active Senior Residences	Senior Adult Housing-Detached (251)	300 du	3.71	1113	0.20	38:62	23	37	60	0.26	61:39	48	30	78
Assisted Residences	Assisted Living (254)	75 beds	2.66	200	0.14	65:35	7	4	11	0.22	44:56	7	9	17
Congregate Residences	Congregate Care Facility (253)	75 du	2.02	152	0.06	59:41	3	2	5	0.17	55:45	7	6	13
Retail	Shopping Center (820)	90.000 ksf	42.94	3865	1.03	61:39	57	36	93	3.75	48:52	162	176	338
Office	General Office Building (710)	50.000 ksf	11.01	551	1.55	88:12	68	9	78	1.49	17:83	13	62	75
Hotel	Hotel (310)	80 rooms	8.17	654	0.56	61:39	27	17	45	0.59	53:47	25	22	47
Total							**222**	**273**	**495**			**432**	**392**	**824**

Source: *Trip Generation* (7th Edition), Institute of Transportation Engineers

Internalization Assumptions

- The DEIR traffic analysis assumes project trip internalization rates that are too high. The Existing Conditions assumption that 38 percent of trips stay within the Town of Moraga is too high considering that 86 percent of service / office commuters travel outside the town and 76 percent of retail purchases made by Moraga residents are located outside Moraga. Similarly, the 60 percent project trip internalization rate under General Plan buildout is too high based on the commute and retail purchase assumptions.
- The daily internalization rates in the DEIR analysis are generally much higher than peak hour internalization rates, yet they were applied to both a.m. and p.m. peak hour project trip generation in the traffic study. Peak hour internalization rates should be calculated for both a.m. and p.m. peak hours and applied to the traffic study accordingly.
- TJKM executed the CCTA model for 2000 and 2030 to verify internalization rates within the Town of Moraga. TJKM found that in 2000, a.m. and p.m. peak hour rates are 28 and 35 percent, respectively. Internalization rates are expected to be very similar in 2030, with a.m. and p.m. peak hour rates of 26 and 35 percent, respectively. However, as

mentioned above the Fehr and Peers cumulative assumptions assume up to 60 percent internalization in future conditions.

- To further verify internalization and trip rates assumed in the MSP traffic study, TJKM examined the existing and future land use assumptions in the CCTA model for the Specific Plan area. Table 2 illustrates the growth assumptions in the CCTA model for the traffic analysis zones (TAZs) that comprise the Specific Plan area. Within this area, the CCTA model estimates an increase of 300 residential units and increased commercial development with 235 additional employees. It should be noted that even though the model assumes increased development in the Specific Plan area, there is virtually no change in the internalization rates between 2000 and 2030.

Table 2: CCTA Land Use Information for the Specific Plan Area

Year	Residential		Commercial					
	Single Family	Multi Family	Retail	Service	Other	Agriculture	Manufacturing	Trade
	(du)	(du)	(emp)	(emp)	(emp)	(emp)	(emp)	(emp)
2000	24	1	258	231	138	18	23	7
2030	312	13	357	321	175	10	43	4
Increase	288	12	99	90	37	-8	20	-3

Notes: du – dwelling units; emp - Employee

Traffic Analysis

- One of the key data requirements for any level of service (LOS) analysis is the signal timing information. The DEIR should specify whether this information was gathered from the City, collected in the field, or optimized using Synchro. The timing information should be included along with other data requirements mentioned in this section.
- The delay index for all study corridors is calculated for the entire length, rather than at any specific corridor locations. This method does not assist in identifying the worst congestion points within each corridor.
- LOS analysis was not conducted for the afternoon school peak period at intersections that are adjacent to Lamorinda schools.
- The intersection of Glorietta Boulevard/Rheem Boulevard has been incorrectly coded as a One-Way Stop controlled intersection instead of an All-Way Stop controlled intersection. LOS analysis of this intersection should be updated accordingly.
- Level of service and delay shown in Table 4.F-12 of the DEIR does not match the HCM results (Synchro output) submitted to the Town of Moraga for the intersection of Bollinger Canyon Road and St. Mary's Road.
- Truck traffic routes and impacts during construction of Moraga Center are not identified for any of the project alternatives. Traffic indices (TIs) and other factors relative to construction truck traffic are not analyzed for the following primary gateways in Lafayette to/from State Route (SR) 24:
  - Acalanes Road
  - Moraga Road
  - St. Mary's Road
  - Pleasant Hill Road / Olympic Boulevard / Reliez Station Road / Glenside Drive

- Expected commercial truck routes via the primary gateways to/from SR 24 serving Moraga Center after construction and expected impacts are not identified for any of the project alternatives. Traffic indices (TIs) that would provide information on expected truck loading on the gateway roadways are not analyzed.
- The DEIR traffic analysis output shows that for each study intersection, an average peak hour factor (PHF) was applied to the overall intersection, rather than different PHFs being applied to individual movements based on peaking characteristics. A PHF for an individual vehicular approach or movement should be applied when that approach or movement has sharp peaking characteristics or low volume in comparison to the intersection as a whole. This is especially relevant for all one-way stop and two-way stop controlled intersections. It should be noted that the neighboring cities of Orinda and Lafayette have numerous unsignalized intersections on arterial streets that do not meet traffic signal warrants. If a PHF different from the overall average was used for the side street movements at these intersections, higher side street delays may result. This could in turn trigger a significant impact at these intersections or possibly cause them to meet the delay warrant for signal installation.

Project Impacts and Mitigation Measures

- DEIR analysis results for the intersection of Moraga Way / Ivy Drive show a significant impact under Existing Plus Project Conditions. However, this is not identified in the DEIR.
- Increased transit service as a mitigation measure does not sufficiently reduce trips to mitigate the operating conditions at all impacted signalized intersections. This is because the analysis assumes fewer than 10 transit trips (given expected increases in area transit service), whereas the project itself adds much higher vehicle trips at the impacted intersections.
- Similarly, limited use of the Community Center as a mitigation would result in a minimal reduction of trips at the impacted intersections. This is because expected trip generation for the Community Center is high only during the p.m. peak period, whereas these intersections are impacted during the a.m. peak period.
- The study does not consider other mitigation measures that are consistent with the Lamorinda Action Plan, such as:
    - Corridor-wide Traffic Signal Coordination
    - Fair share contribution to the implementation actions identified under the Pleasant Hill Road Action Plan
    - Existing improvement plans, such as capital improvement program (CIP) lists in the City of Lafayette. These could identify other potential improvements for the intersections being considered for mitigation in the study.
- The entire length of the Glenside Drive, Reliez Station Road and Olympic Boulevard corridors should be evaluated as part of the mitigation measures. For instance, adding signals at N. Glenside Drive and Burton Drive, S. Glenside Drive and Reliez Station Road, and St Mary's Road and S. Glenside Drive under cumulative conditions would not be effective, since the All-Way Stop would remain at the intersection of Glenside Drive and Los Palos Drive and no upgrades are proposed at the intersection of Glenside Drive and Michael Lane.
- The traffic analysis has not considered or commented on the impact of the project on the flashing signals at the intersection of Reliez Station Road and Diane Court and the trail crossing on S. Glenside Drive, west of Burton Drive.
- Qualitative discussion or comments on the impact of the project on the following three Lafayette intersections should be included as part of the DEIR:

1. Moraga Road and Old Jonas Hill Road
2. Moraga Road and Silver Springs Road
3. Moraga Road and Hamlin Road

- The DEIR finds that the Plan will have a significant impact on downtown Lafayette intersections (Page 4.F-52). One of the proposed mitigations is to enhance transit service in Lamorinda area south of Highway 24. While enhanced transit service is a commendable goal, the DEIR fails to provide an estimate of fair share contribution of the Plan to help in paying for the enhancement of the transit service particularly between Moraga and Highway 24.
- The DEIR finds that the Plan will have a significant impact on unsignalized Lafayette intersections (Page 4.F-55). To mitigate these impacts, the DEIR recommends the installation of traffic signals at the following intersections in Lafayette:
    a. Deer Hill Road/Oak Hill Road
    b. Glenside Drive/Reliez Station Road
    c. Glenside Drive/Burton Drive
    d. Pleasant Hill Road/Olympic Boulevard

  The Lafayette General Plan calls for the signalization of only Deer Hill Road/Oak Hill Road and Pleasant Hill Road/Olympic Boulevard intersections. The other two intersections are located in residential Burton Valley area and signalizing those intersections are not compatible with the characteristics of the area and more importantly not consistent with goals and policies of the Lafayette General Plan.
- The DEIR finds that the Plan will create adverse vehicular impacts on Pleasant Hill Road, a Route of Regional Significance (Page 4.F-66). However, no mitigation is proposed. Mitigations measure should be proposed that are consistent with the Pleasant Hill Road Action Plan, including corridor-wide signal coordination.
- If the mitigation measures identified in the DEIR or in this letter do not mitigate impacts to less than significant levels, then the DEIR should additionally evaluate innovative strategies like traffic metering, traffic responsive signal system or adaptive traffic signal systems. The effects of these mitigation measures should take into account their effects on Lafayette and Orinda.

Other Issues

- In the City of Lafayette's DEIR scoping comments sent to the Town of Moraga on September 4, 2007, several Lafayette intersections were recommended for analysis. However, three (3) Lafayette intersections located along expected routes to Moraga Center were not included in the traffic analysis:
    1. St. Mary's Road at Rohrer Drive
    2. Reliez Station Road at Olympic Boulevard
    3. Reliez Station Road at Glenside Drive South (at Michael Lane intersection)
- The study does not include a collision analysis, which would help evaluate potential project safety impacts by identifying existing collision patterns and qualitatively discussing the impact of the project on collision rates.
- The traffic impact analysis does not include the construction of the 4th bore to the Caldecott Tunnel. This would affect the traffic analysis for the Cumulative Conditions.
- Under Mitigation 4F-5 (page 4.F-58), the DEIR states that "... the Project applicant shall fully fund and construct the mitigation measure and shall be reimbursed for the portion

beyond their fair share contribution from future available funding sources." The mitigation measure includes the installation of four signals in the City of Lafayette. Since these signal installations would be subject to the City of Lafayette's approval for inclusion in the Lamorinda fee program, it may be better to state that the Project Applicant shall be required to set aside fair share funds for City of Lafayette use as corridor improvements are approved and implemented.

The inadequacies listed in this letter should be addressed and rectified prior to finalizing the EIR. In addition, all mitigations proposed in Lafayette and Orinda should be checked for consistency with their respective General Plans.

TJKM appreciates the opportunity to provide preliminary review findings on the Moraga Specific Plan DEIR traffic analysis. Please call (925) 463-0611 if you have any questions.

Thank you.

Joy Bhattacharya, P.E., P.T.O.E.
Senior Associate

Andrew Kluter, P.E.
Senior Engineer

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